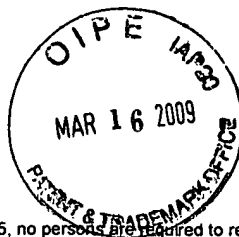


Doc Code: AP.PRE.REQ



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTO/SB/33 (01-09)

Approved for use through 02/28/2009. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

169.12-0621

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on 3/11/09

Signature Nathaniel P. Longley

Typed or printed name Nathaniel P. Longley

Application Number

10/700,031

Filed

November 3, 2003

First Named Inventor

Mehmet Hancer

Art Unit

2627

Examiner

Donald D. Davis

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

- ☐ applicant/inventor.
- ☐ assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

☒ attorney or agent of record.  
Registration number 62,668

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 \_\_\_\_\_

Nathaniel P. Longley  
Signature

Nathaniel P. Longley

Typed or printed name

612-339-1863

Telephone number

3/11/09

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor	: Mehmet Hancer	
Appln. No.	: 10/700,031	Confirmation No.: 3406
Filed	: November 3, 2003	Group Art Unit: 2627
Title	: ENCAPSULANT FOR A DISC DRIVE COMPONENT	Examiner: Donald D. Davis
Docket No.	: I69.12-0621	

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Mail Stop AF  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SENT VIA U.S. CERTIFIED MAIL**  
Receipt No.: 7003 1680 0000 5255 3670

**INTRODUCTION**

This Pre-Appeal Brief Request for Review follows the final Office Action mailed October 15, 2008 and the Advisory Action dated January 30, 2009. No amendments are filed with this Request. A Notice of Appeal and appropriate fees are enclosed.

**REMARKS**

In the final Office Action mailed October 15, 2008, claims 1–3, 5–9 and 11–14 were rejected under 35 U.S.C. § 102, claims 1 and 7 were rejected based on nonstatutory obviousness-type double patenting, and claims 4 and 10 were objected to as dependent upon a rejected base claim. (Final Office Action, ¶¶ 3, 5–7.) In the Amendment of January 14, 2009, claims 4 and 10 were rewritten in independent form and claims 1 and 7 were amended to incorporate the limitations of claims 2–3 and 8–9, respectively. (Amendment, pp. 2–4 (entered by Advisory Action, ¶ 7).) In the Advisory Action, the double-patenting rejection of claims 1 and 7 is overcome by terminal disclaimer, claims 4 and 10 are allowed, and the rejection of record is maintained for claims 1, 4, 5–7 and 11–14. (Advisory Action, ¶¶ 5, 7, 11.) In addition, previously withdrawn claims 15–21 now depend from claim 1, and are allowable upon a finding that claim 1 is patentable.

Based on the record, claims 1, 2, 5-8 and 11-14 were rejected under 35 U.S.C. § 102(b) as anticipated by Ogawa et al., U.S. Patent No. 5,425,988 (Ogawa). (Final Office Action, ¶ 5.) On entering the Amendment, claim 1 incorporates the subject matter of claims 2 and 3, claim 7 incorporates the subject matter of claims 8 and 9, and claims 2, 3, 8 and 9 are canceled. Since Ogawa is not a basis for rejecting the incorporated subject matter of claims 3 and 9, claims 1 and 7 (as amended) are not anticipated under 35 U.S.C. § 102(b). See M.P.E.P. § 2131 ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.") (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987)).

More specifically, amended claims 1 and 7 each require an encapsulant comprised of a self-assembled monolayer, where the self-assembled monolayer is composed of an organosilane selected from the group that was originally recited in claims 3 and 9. Claims 3 and 9 are now canceled, and this subject matter is incorporated into claims 1 and 7. (See Amendment, pp. 2-4, 6.)

The claimed group of organosilanes consists of octadecyltrichlorosilane (OTS), octadecyldimethylchlorosilane, butyltrichlorosilane, perfluorodecyltrichlorosilane, alkylsiloxane, alkyl and perfluoroalkyl-trichlorosilane, dichlorosilane, alkene and alkyl ethoxy silanes, octadecyltriethoxysilane, alkylaminosilanes, and alkanethiols. *Id.* Ogawa does not disclose an organosilane selected from this group, and thus lacks at least one essential element required for a prima facie rejection of claims 1 and 7 under 35 U.S.C. § 102(b). (See, e.g., Office Action dated February 7, 2008, ¶ 3 (stating that the subject matter of claims 3 and 9 is allowable over Ogawa).) Ogawa also does not anticipate claims 5-6 and 11-14, because these claims depend from claims 1 and 7, respectively. Thus the rejection of claims 1, 5-7 and 11-14 under 35 U.S.C. § 102(b) is in error, and should be withdrawn.

The final Office Action also rejects claims 1 and 7 under 35 U.S.C. § 102(e), as anticipated by Yang et al., U.S. Patent No. 6,822,833 (Yang). (Final Office Action, ¶ 6 (before amendment, rejecting claims 1-3 and 7-9).) This rejection is also in error, because Yang lacks at least one element required to establish a prima facie case of anticipation under 35 U.S.C. § 102(e).

As amended, claims 1 and 7 each claim (i) an encapsulant comprising a self-assembled monolayer, where the self-assembled monolayer is (ii) composed of an organosilane selected from the claimed group, (iii) has a self limiting thickness of one layer of a molecule, and (iv) covers an exposed surface of a component of an actuation system. (See Amendment, pp. 2-3.) Yang discloses a self-assembled image layer and a feature layer that is self-assembled over the image layer, but neither Yang's image layer nor Yang's feature layer meets these claim limitations, so Yang does not anticipate under 35 U.S.C. § 102(e).

First, Yang's image layer is not (i) an encapsulant, because Yang's image layer is used to define the width of the feature layer, not to encapsulate a component of an actuation assembly, as pointed out in claims 1 and 7. See, e.g., Yang, col. 5, ll. 64-66 ("an exposed width in the image layer defines a feature width in a subsequent process"); col. 4, ll. 24-33; col. 5, ll. 3-10; col. 10, ll. 41-47. In fact, Yang's image layer *cannot* encapsulate a component, as claimed by Applicants' claims, because Yang teaches that the component includes a feature layer that is formed *over* the image layer, and the image layer cannot encapsulate a component when part of the component (i.e., the feature) is formed over the image layer. See, e.g., Yang, col. 2, ll. 20-21 ("each component also includes a feature layer that is self-assembled over the self-assembled image layer").

Similarly, Yang's feature layer is also not (i) an encapsulant, because Yang's feature layer forms a write pole tip or other feature of a magnetic disc drive component, not an encapsulant for such a component, as claimed in claim 1 and claim 7. See, e.g., Yang, col. 5, ll. 26-34 ("the feature can be a write pole tip, nanowires or any other feature of a disc drive component"); col. 5, ll. 8-15, col. 7, ll. 5-8; col. 10, ll. 31-33; FIGS. 3-5. Thus a person of ordinary skill would not recognize either Yang's image layer or Yang's feature layer as an encapsulant, and Yang does not anticipate claims 1 and 7 under 35 U.S.C. § 102(e). See, e.g., M.P.E.P. § 2112 ("To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.'") (citing *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999)).

Second, Yang's feature layer is composed of nanoparticles (preferably magnetic nanoparticles), not (ii) an organosilane. See, e.g., Yang, col. 3, ll. 35-28, 44-51; col. 6, ll. 43-45;

col. 7, ll. 2–5, 9–12. Yang's image layer *may* comprise an organosilane from the claimed group (see, e.g., Yang, col. 8, ll. 43–45), but Yang still does not anticipate because the image layer is not (i) an encapsulant, as described above.

Third, neither Yang's image layer nor Yang's feature layer has (iii) a self limiting thickness of one layer of a molecule, as required by claims 1 and 7. In particular, Yang teaches that organosilanes *may* form monolayers, but the organosilanes are not self-limiting to one layer of a molecule because they also form non-monolayer systems. See, e.g., Yang, col. 7, ll. 28–29 (“SA films of alkylsiloxanes can form monolayers *or near monolayer systems*”) (emphasis added).

In particular, Yang's multilayer feature assembly 380 is formed by layering nanoparticles 344 and functional surfactant molecules 328 over the image layer. See, e.g., Yang, col. 9, l. 60 – col. 10, l. 9; FIG. 10. The surfactant molecules in the feature layer, however, are easily replaced by functional groups from the image layer, forming a non-monolayer structure. Yang, col. 9, ll. 1–6 (“The surfactant molecules 281 around the particles 280 (in FIG. 8) are easily replaced by other types of surfactant molecules. The surfactant molecules 281 can be replaced, for example, by the functional groups (262, 264, 266 [organosilanes] in FIG. 7) from the surface of the image layer.”) While Yang's image layer may be composed of a claimed organosilane, that is, the organosilane does not have a self limiting thickness of one layer of a molecule, as required by claims 1 and 7. See also, e.g., M.P.E.P. § 2112 (“Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.”) (citing *Robertson*, 169 F.3d at 745).

Fourth, neither Yang's image layer nor Yang's feature layer (iv) covers an exposed surface of a component. Instead, Yang's image layer is covered by Yang's feature layer, as described above, and the uncovered portions are removed before the feature layer itself is covered by additional layers of the read/write head. See, e.g., Yang, col. 6, ll. 46–51 (“The undeveloped portions 211 (corresponding to undeveloped regions 178 in FIG. 5) of the self-assembled image layer 206 (and any underlying seed layer) may be removed to facilitate deposit (using other processes) of further layers of the read/write head.”) Thus neither Yang's image layer nor Yang's feature layer (iv) covers an exposed surface of a component of an actuation system, as required by Applicants' claims, and

the record provides no evidence to suggest that a person of ordinary skill would necessarily believe otherwise. See M.P.E.P. § 2112 (“[T]he examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.”) (citing *Ex parte Levy*, 17 U.S.P.Q. 2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)) (emphasis in original).

The rejection of claims 1 and 7 thus lacks at least one essential element required for a prima facie case of anticipation under either 35 U.S.C. § 102(b), as based on Ogawa, or under 35 U.S.C. § 102(e), as based on Yang. These rejections are in error, and should be withdrawn. In addition, Yang is not available as a reference under 35 U.S.C. § 103(a), due to common ownership or obligation to assign under 35 U.S.C. § 103(c). (See Amendment, p. 6.)

Claims 1 and 7 thus define over the prior art, and are in condition for allowance. Claims 5–6 and 11–14 are also in condition for allowance, as dependent upon claims 1 and 7, respectively. In addition, claims 4 and 10 are allowed by the Advisory Action, and previously withdrawn claims 15–21 are allowable upon a finding that base claim 1 is patentable. Each of Applicants’ pending claims 1, 4–7, 10–14 and 15–21 is therefore in condition for allowance, and a finding to that effect is requested.

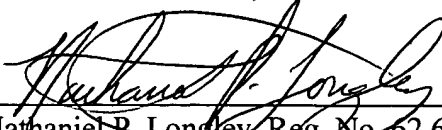
Respectfully submitted,

KINNEY & LANGE, P.A.

Date:

11 March 2009

By:

  
Nathaniel P. Longley, Reg. No. 62,668  
THE KINNEY & LANGE BUILDING  
312 South Third Street  
Minneapolis, MN 55415-1002  
Telephone: (612) 339-1863  
Fax: (612) 339-6580

NPL:dlo